REMARKS

This Application has been carefully reviewed in light of the Office Action mailed November 20, 2007 (the "Office Action"). At the time of the Office Action, Claims 1-7, 9-15, 17-23, 25-31, and 33 were pending in the Application. The Office Action rejects Claims 1-7, 9-15, 17-23, 25-31, and 33. Applicants respectfully traverse these rejections and request reconsideration and favorable action in this case.

Section 101 Rejection

The Office Action rejects Claims 17-24 under 35 U.S.C. § 101 because the Office Action suggests that the claimed invention is directed to non-statutory subject matter. More specifically, the Office Action contends that "[i]t appears the logic as recited are executable instructions, therefore, they are software. Software or program per se is non-statutory subject matter." *Office Action*, page 2. However, the M.P.E.P. states that "[w]hen functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized." *M.P.E.P.* § 2106.01. Claim 17 recites that the logic is encoded in computer readable media.

In response to previous arguments by Applicants the Office Actions contends that "[e]ven though the amended claim 17 includes the phrase of 'computer readable media', the claimed subject matter is still 'logic for managing network traffic'" and that therefore "[t]he claimed logic is not 'structurally and functionally interrelated to the medium.'" *Office Action*, page 6. This ignores both the language of Claim 17 as well as the M.P.E.P. Claim 17 recites that the logic is encoded in computer readable media. The Office Action fails to "evaluat[e] each claim limitation" as required by the M.P.E.P. *M.P.E.P.* § 2106(II)(C). The M.P.E.P. further states that "a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined." *M.P.E.P.* § 2106(II)(C). Thus, the Office Action has improperly ignored the fact that Claim 17 recites the "the logic [is] encoded in computer readable media." The Office Action has also ignored the M.P.E.P.'s teaching that "[w]hen functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized."

M.P.E.P. § 2106.01 (emphasis added). More specifically, because the logic is encoded in computer readable media the M.P.E.P. dictates that the logic "becomes structurally and functionally interrelated to the medium." The Office Action can not therefore conclude that the "logic is not 'structurally and functionally interrelated to the medium.'" *Office Action*, page 6. Therefore, Applicants respectfully request that this rejection of Claims 17-24 be withdrawn.

Section 102 and 103 Rejections

The Office Action rejects Claims 1-2, 4-7, 9-10, 12-15, 17-18, 20-23, 25-26, 28-31, and 33 under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent Application Publication US 2003/0117678 A1 issued to Chang, et al., ("*Chang*"). The Office Action rejects Claims 3, 11, 19, and 27 under 35 U.S.C. § 103(a) as being unpatentable over *Chang* in view of U.S. Patent 6,882,627 B2 issued to Pieda, et al. ("*Pieda*"). Applicants respectfully traverse these rejections at least for the reasons discussed below.

Claim 1 recites computing a hybrid path route for a selected label switched path (LSP) between a first node and a second node of the plurality of nodes, the hybrid path route comprising at least one IP link and at least one lightpath of a wavelength division multiplex (WDM) topology coupled to the IP network. *Chang* does not disclose computing a hybrid path route. The Office Action has simply identified FIG. 36A of *Chang*. *Office Action*, page 3. FIG. 36A at best merely discloses the existence of IP links and WDM links. The Office Action has not shown where *Chang* shows <u>computing a hybrid path route</u> for a selected label switched path between a first node and a second node of the plurality of nodes. The written description corresponding to FIG. 36A indicates that the secure data network 3615 (the network comprising IP links) is coupled to the public optical network 3625 (the network comprising the WDM links). *Chang*, paragraph [0224]. Within this framework *Chang* only discloses determining routing within the optical network. Thus, *Chang* does not disclose computing a hybrid path route — it only discloses computing a path route using optical links. More specifically, *Chang* discloses receiving a packet from an IP router, converting it into a suitable optical form and then routing it through all optical components until it reaches its destination. *See e.g., Chang*, FIGS. 17-19, 28, 29, 31, and 36; and paragraphs 155-156, 196, 197, 212 and 224.

In response to previous comments by Applicants the Office Action contends that "it is clearly and explicitly illustrated in the drawings" that *Chang* discloses a "network compris[ing] 'the hybrid path route comprising at least one IP link and at least one lightpath of a wavelength division multiplex (WDM) topology coupled to the IP network.'" *Office Action*, page 7. Applicants do not contest that *Chang* discloses the existence of IP networks and WDM networks. However, neither the figures nor the written description of *Chang* disclose computing a hybrid path route. The figures of *Chang* merely depict that the optical network is coupled to IP networks. The disclosure of *Chang* repeatedly discusses how routing may be performed within the optical network but never discusses routing outside the optical network (e.g., within the electrical network). Thus, any route computed by *Chang* is purely through optical components and therefore is not a hybrid path route.

The following examples from *Chang* illustrate that to the extent *Chang* discloses computing a route, the computed route is entirely within the optical network and thus not a hybrid path route. The first example is found in paragraph [0113] where *Chang* discloses the routing protocol and the functions it performs. *Chang*, paragraph [0113]. "Each network element 121-125 in combination with NC&M 220 effects a routing protocol." *Chang*, paragraph [0113]. The network elements 121-125 use the routing protocol to "forward measured information to NC&M 220 for routing computations." *Chang*, paragraph [0113]. After calculating the routing tables NC&M 220 "disseminates the routing tables to each network element 121-125." *Chang*, paragraph [0113]. Upon receiving "a connection request from an IP router . . . information from the NC&M . . . [is] inputted in optical signaling header 210." *Chang*, paragraph [0113]. "Packets are [then] routed through network 200 using the information in signaling header 210." *Chang*, paragraph [0114]. As can be seen in this example, the information needed for routing is collected and distributed among network elements 121-125 which are optical components of optical network 200. *See e.g., Chang*, paragraph [0104] ("optical network 200" and "WDM network elements 121-125"). Therefore, the route that is used is not a hybrid route path. Another similar example is found in paragraph [0105] of *Chang*. In paragraph [0105] it is disclosed that "the overall path from source 123 to destination 122 includes paths 201 and 202 in cascade." *Chang*, paragraph [0105]. The "cost is computed based on the total propagation distance, the number of hops, and the traffic load." *Chang*, paragraph [0105]. Here *Chang* clearly discloses the overall

path comprising only optical path segments (paths 201 and 202). Furthermore, the cost of each path segment is derived solely from optical components. Another example can be found at paragraph [0119] in which *Chang* states that "the global routing tables [are downloaded] to each of the elements" of the WDM backbone network 500. *Chang*, paragraph [0119]. Once again there is no mention of anything other than optical network components. Yet another example is found with respect to FIG. 36A and the corresponding description in paragraph [0224]. "Module 3610 has the important function of maintaining information on the status of the network as a whole, that is, public optical network 3625." *Chang*, paragraph [0224]. This information includes "packet loss, throughput, and delay" which may be used to "develop a database of links that are the 'best' links to use for any given transmission application." *Chang*, paragraph [0224]. *Chang* again clearly recites collecting information from optical networking components without discussing collecting such information from components other than those that are a part of optical network 3625. This further indicates that *Chang* is only concerned with determining paths within the optical networks.

Accordingly, for at least these reasons Applicants respectfully request that this rejection of Claim 1, and all claims depending therefrom, be withdrawn. For analogous reasons, Applicants also respectfully request that this rejection of Claims 9, 17, 25 and 33, and all claims depending therefrom, be withdrawn.

Claim 2 recites decommissioning an idle IP link after rerouting a selected LSP. *Chang* does not disclose decommissioning an idle IP link. The Office Action contends that this is disclosed in paragraph [0113] of *Chang*. *Office Action*, page 4. *Chang* discloses collecting routing information, creating routing tables and then distributing the routing tables to various network elements. *Chang*, paragraph [0113]. The functions recited in paragraph [0113] of *Chang* do not disclose decommissioning an idle IP link after rerouting the selected LSP. In response to Applicants' previous remarks the Office Action contends that paragraph [0113] of *Chang* inherently discloses decommissioning an idle IP link. *Office Action*, page 7. The Office Action further contends that "the routing table [of Chang] provides information of both available routing paths and the path used to reach destination. [And] the available paths that are not currently used reads on the claimed 'idle link.'" *Office Action*, page 7. The routing tables of *Chang* at best create idle links. Creating idle links does not, explicitly or inherently, disclose decommissioning a link once it has become idle. More specifically, there

is nothing about creating an idle link that would inherently suggest decommissioning the link. Furthermore, even if *Chang* disclosed decommissioning idle IP links, it does not disclose decommissioning an idle IP link <u>after</u> rerouting a selected LSP. More specifically, *Chang* discloses that the routing tables are distributed periodically. *Chang*, paragraph [0113]. Therefore they are not distributed after rerouting a selected LSP. Therefore, for at least these additional reasons Applicants request that this rejection of Claim 2 be withdrawn. For analogous reasons, Applicants also request that this rejection of Claims 10, 18, and 26 be withdrawn.

Claim 4 recites that determining whether performance of the hybrid path route for the selected LSP reduces costs comprises accounting for a cost associated with each IP link and each lightpath of the hybrid path route. The Office Action contends that this is disclosed in *Chang* paragraph [0105]. *Office Action*, page 4. As discussed above, *Chang* is only concerned with routing and costs associated with optical components. *See e.g. Chang*, Abstract, paragraphs [0099] and [0105]. For example, all the information gathered and calculations performed by the routing protocol disclosed by *Chang* are done with and distributed to optical network elements 121-135. *Chang*, paragraph [0113]. More specifically, *Chang* does not disclose the routing protocol measuring network parameters for any of the links of the electrical layer comprising the IP routers 111 and 112. Thus, *Chang* does not disclose determining whether performance of the hybrid path route for the selected LSP reduces costs comprises accounting for a cost associated with each <u>IP link and each lightpath</u> of the hybrid path route.

In response to similar arguments the Office Action contends that *Chang* inherently discloses determining whether performance of the hybrid path route for the selected LSP reduces costs comprises accounting for a cost associated with each IP link and each lightpath of the hybrid path route. *Office Action*, pages 8-9. The Office Action contends that "Chang explicitly discloses that 'each destination is associated with a preferred path which would minimize the cost' and that the cost 'is computed based on the total propagation distance, the number of hops, and the traffic load.'" *Office Action*, pages 9. From this the Office Action contends that "[i]t is clear that the reduction of the costs in Chang read the claimed limitation of reducing costs." *Office Action*, pages 9. The Office Action further contends that "because Chang discloses hybrid paths in the network, the reduction of the costs of Chang reads on the

claimed limitation." *Office Action*, page 9. However, as discussed above *Chang* only discloses routing within an optical network and thus does not disclose accounting for the cost associated with each IP link and each lightpath of the hybrid route path. This is seen in the portion of *Chang* cited by the Office Action. The overall path disclosed in paragraph [0105] of *Chang* (between a source node 123 and a destination node 125) is only through optical network 200. Because both the source and destination nodes as well as all the intermediary nodes are all part of optical network 200 there can not be a hybrid path. Accordingly, to the extent that the preferred path implicitly discloses determining whether the performance of one path reduces the cost as compared to another path, neither path may be a hybrid path. Thus there is no accounting for the cost of each IP link and lightpath.

Therefore, for at least this additional reason Applicants respectfully request that this rejection of Claim 4 be withdrawn. For analogous reasons, Applicants also request that this rejection of Claims 12, 20 and 28 be withdrawn.

Claim 33 recites several limitations not found in Claim 1. Despite previously indicating that Claim 33 recites additional limitations not found in Claim 1, the Office Action has not provided support for its rejection of each element of Claim 33. Applicants respectfully request that support be provided.

No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the references cited by the Examiner. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are sufficient to overcome the Examiner's rejections.
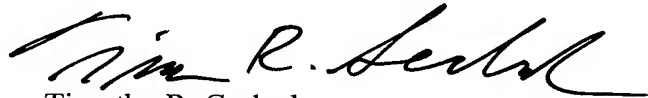
CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further requests that the Examiner contact the undersigned attorney to schedule the telephone conference.

Applicants believe no fee is due, but to the extent necessary, any additional required fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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